

BROSCIDES

(SUB-FAM. OF COLEOPTERA).

By THOMAS G. SLOANE, F.E.S.

Before dealing with the species of the sub-family *Broscini* which follow, it is necessary to offer some remarks on the classification of those Australian Broscides which are characterised by having the sinus of the mentum without any median tooth-like projection. These are comprised in five genera, viz., *Gnathoxys* (Westwood), *Parroa*, *Adotela*, *Cerotalis* (Castelnau), and *Brithy-sternum* (Macleay, W.). It is only with those species that fall into the genera *Parroa*, *Adotela*, and *Cerotalis* that we are at present concerned. In forming these three genera, Count de Castelnau (Trans. Roy. Soc. Victoria, VIII., 1868) relied entirely on features belonging to the male to separate them from one another. The differences he gives may be tabulated as follows:—

Male with last joint of palpi thick, oval, truncate; anterior tarsi not clothed with spongiöse tissue below. *Parroa*.

Male with last joint of palpi securiform; three basal joints of anterior tarsi with spongiöse tissue below. *Adotela*.

Male with last joint of palpi truncate; four basal joints of anterior tarsi with spongiöse tissue below. *Cerotalis*.

The late M. Putzeys, in monographing the *Broscini* in 1868 (Stett. Ent. Zeit.), united Castelnau's genus *Cerotalis* with *Promecoderus*, but followed that author in maintaining *Parroa* and *Adotela* as separate genera. Returning to the subject in 1873, he reviewed the Broscides of the Castelnau collection (Ann. Mus. Civ. Genov., IV.), when he still united *Cerotalis* with *Promecoderus*, and also united *Parroa* with *Adotela*, believing the genus *Parroa* had only been founded on female specimens of *Adotela*. He remarks (p. 337)—“Toutes les *Parroa* de la collection sont des males et les *Adotela* females ne différent pas des *Parroa*,”

In 1890, when reviewing the genus *Promecoderus* and the Australian Broscides allied to it (Proc. Linn. Soc. N.S.W. (2), V.), I regarded (as I still do) *Cerotalis* as distinct from *Promecoderus*, but I united *Parroa* with *Adotela*, remarking (p. 229):—“When de Castelnau wrote on the Australian *Broscini* in 1867, he was misled by the very different form of the palpi in the different sexes of this genus, and formed a separate genus for each sex.” In extenuation of my mistake in thus misrepresent-

ing the value of Castelnau's observations on these insects, I can only plead that I thought M. Putzeys' evidence that all the species of *Parroa* in the Castelnau collection when he went over them in 1873 were females, was conclusive proof Castelnau was in error in attributing to the males of *Parroa* nonsecuriform palpi and non-spongiose anterior tarsi.

I have now seen three species in which the male is certainly without spongiose tissue on the underside of any joints of the tarsi; so it is evident Castelnau was right. Either such male specimens must have been lost before M. Putzeys looked through the Castelnau collection; or he spoke after a mere superficial examination of the specimens before him, when he said all the species of *Parroa* were females.

I am now able to make a considerably more extended review of the forms comprised in the genera *Parroa*, *Adotela*, and *Cerotalis* than in 1890; but my knowledge of the previously described species is confined to so few species that I can suggest no alteration in their classification, nor can I find any decided differences, apart from sexual characters, between them. Genera founded entirely on features appertaining to one sex seem to me too artificial to be maintained in a natural system of classification; but, when our knowledge of a group is too slight to enable us to divide it into genera of undoubted natural value, an artificial system must be adopted, and this seems such a case. As will be seen from my remarks on the genus *Parroa*, which follow, I am doubtful of the position of many species; but the material I have clearly indicates that, either all the species now placed in the genera *Parroa*, *Adotela*, and *Cerotalis* will have to be united in one genus, or new genera will in all likelihood be required for *Parroa* (*Adotela*) *australis*, Sl., and similar forms; for *Parroa* *apicalis*, Sl.; and possibly for *Adotela* *Frenchi*, Sl. There seems little doubt but that we may expect many new species of *Broscini* to be found in Australia, which, when obtained, will enable us to determine the true classificatory value of the differences between forms such as those on which the genera *Parroa*, *Adotela*, and *Cerotalis* have been established. In the meantime, to make new genera for apparently aberrant forms would in all probability merely cause confusion and instability of nomenclature, troubles already only too rife in zoology.

GENUS PARROA.

I regard *P. Howitti*, Casteln., as the type of the genus *Parroa*; with it may be associated *P. grandis*, Casteln., and *P. noctis*, Sl. (n. sp., *vide post*). These species seem united by a similarity in the form of the labrum, antennæ, femora, posterior trochanters, tarsi, &c.; but, as the male of neither *P. grandis* nor

P. Howitti has yet been recorded, there must remain some doubt as to the amount of affinity amongst them.

Adotela australis, Sl. (which I now know to have the male with non-securiform palpi, and non-spongiose anterior tarsi); *Adotela atronitens*, Sl. (which is too closely allied to *Parroa australis*, Sl., to be disassociated from it); and *Parroa lævigata*, Sl. (n. sp., *vide post*), form a group distinguished from the *P. Howitti* group by their emarginate labrum, lighter and less flattened femora, not channelled below for their whole length; narrower posterior tarsi, with apical joint narrowed to base; short very obtuse posterior trochanters; bordered basal margin of prothorax, &c. *Parroa apicalis*, Sl. (n. sp., *vide post*) may possibly be an *Adotela*; in any case it has but little affinity to either of the groups mentioned above. Three other species have been referred to the genus *Parroa* by De Castelnau, viz., *P. carbonaria*, Casteln.; *P. violacea*, Casteln.; and *P. bicolor*, Casteln. These are only known to me by too short descriptions, but I should think *P. carbonaria* was rightly placed in *Parroa*, while *P. violacea* and *P. bicolor* may likely prove species of *Adotela* when the male is reported. Three species of *Adotela*, viz., *A. striolata*, Putz.; *A. nigerrima*, MacL., and *A. frenchi*, Sl., have been described without any notice of the male. I should think it quite likely that they will all prove to have the male characters those of *Parroa* rather than of *Adotela*, but they must remain in the latter genus till the male is recorded.

***Parroa grandis*, Castlenau.**

Trans. Roy. Soc., Victoria, 1868, VIII., p. 174; Putzeys, Stett. Ent. Zeit., 1868, p. 350; *Adotela grandis*, Putzeys, Ann. Mus. Civ., Genov., 1873, IV., p. 337; Sloane, Proc. Linn. Soc., N.S.W., 1890 (2), V., p. 237.

Female.—Form broad, convex, robust. Black, shining. Head broad, short (6 x 6.5 mm.), smooth, excepting a slightly rugulose shallow impression on each side between the eyes; clypeal suture distinctly impressed, curved; clypeus truncate, declivous in front, a small puncture on each side very near the edge; eyes round, convex, not prominent or inclosed behind. Mandibles short, strong. Labrum short, without median sulcus; anterior angles quite rounded off; middle of anterior margin truncate. Antennæ short, thick, subfiliform; the joints very little flattened, second shortest—shorter than the fourth—last oval, pointed at apex. Prothorax broader than long (8.5 x 10.5 mm.), widest about half-way between the marginal punctures, lightly and shortly narrowed behind, convex (the disc a little depressed), not declivous behind, longitudinally rugulose near anterior and basal margins (the rugæ of the basal part stronger and more irregular); anterior

margin somewhat sinuate between the lateral borders; base truncate, not bordered; anterior angles broadly and shortly advanced, obtuse, their inner margin very oblique; basal angles rectangular; lateral border *entire*,* thick, narrow in middle, widening in front to anterior angles, thicker and more prominent behind, not sinuate before the base; median line rather strongly impressed, not reaching anterior margin, losing itself in the rugulose part behind. Elytra smooth, broadly oval (18.5 x 11 mm.), subparallel on sides, shortly rounded to peduncle, broadly rounded behind, convex, declivous behind, hardly at all declivous to peduncle behind scutellum; suture deeply impressed on disc; border narrow, slightly wider behind; a row of unequally and rather widely-placed punctures at a little distance from the margin. Prosternum transversely and irregularly striolate in front of the coxæ, strongly declivous to anterior margin, not excavate between the coxæ, truncate behind. Inflexed part of pronotum projecting sharply beyond the episterna. Ventral segments covered with fine irregular scratches; apex rugulose. Femora broad, flattened, irregularly transversely striolate, longitudinally excavate below for whole length; posterior ones strongly dilatate on lower side behind the middle: anterior tibiæ wide at apex, ending externally in a dentiform projection, outer edge thin with one or two very minute projections; four posterior tibiæ dilatate at apex, their outer edge concave: posterior trochanters transversely striolate, oval, narrowed to apex and obtuse: posterior tarsi of moderate length; joints 1—4 successively shorter, first not as long as two succeeding ones together, last short, convex, hardly narrower at base.

Length, 29; breadth, 11 mm.

Habitat.—Murchison District, West Australia.

This is the largest species of the genus, its affinity is to *P. Howitti*, Casteln., from which its greater size and broader form help to distinguish it. I have only seen the specimen described above, and have been unable to compare it with *P. Howitti*.

The description above may be supplemented by reference to the following points, the value of which, though I have found them worthy of notice in separating the species of *Parroa* and *Adotela*, I have not been able to satisfactorily determine from want of a sufficient number of specimens to examine. The sinus of the mentum is bordered, thus causing the bottom of the emargination to assume a lightly bisinuate form, the middle being

*The lateral border of the prothorax being sometimes (as in *Adotela Frenchi*, Sl.) obsolete before reaching the base, I have, for the sake of brevity, thought it convenient to call it *entire* when it reaches uninterruptedly along the sides from the anterior to the basal margin.

somewhat produced; the penultimate joint of the labial palpi is plurisetose in front and dilatate towards the apex; that of the maxillary palpi is short and triangular, with a seta projecting forward internally; these features are found in other species of the genus and also in some species of *Adotela*. The puncture usually found among the CARABIDÆ towards the outer side of the anterior femora, near the apex, is wanting.* The posterior coxæ have only a single puncture on each near the inner margin, a little before the insertion of the trochanters.† In all allied species known to me this puncture is present. In the specimen before me the anterior part of the clypeus is covered with minute punctures.

***Parroa noctis*, spec. nov.**

Form rather elongate, convex, robust, smooth on upper surface. Entirely of a deep shining black. Head large (6 x 6 mm.), convex, smooth; frontal impressions obsolete; clypeal suture lightly marked, extending forward obliquely on each side; clypeus truncate, a foveiform puncture on each side; eyes convex, not prominent or inclosed behind. Mandibles strong, elongate. Labrum prominent, subrotundate in front, longitudinally sulcate in middle. Antennæ rather thick, filiform; basal joint‡ thick, second shorter than fourth, last narrow, fusiform. Prothorax very little broader than long (8.75 x 9.25 mm.), widest rather before the middle, gently and but little narrowed behind, lightly convex, not declivous behind; basal part defined by a shallow broad

* I believe the presence or absence of this puncture (which I propose to call the *external apical puncture* of the anterior femora) to be of some classificatory value among the CARABIDÆ; its presence is invariable in all the Australian Broscides I have seen, excepting the present specimen. If normally absent in *P. grandis*, it seems probable its loss is owing to the rugosity of the part of the femur where it is usually found. It is almost obsolete in *P. noctis*, Sl.

† The punctures found on the posterior coxæ of nearly all the CARABIDÆ seem capable of use in classification, but I have not been able to find that they have yet been so used, or to come to any definite conclusion as to how much value attaches to them. The usual number of these punctures among the CARABIDÆ seems to be three; and, as one, two, or all three of these may be wanting, it appears necessary if they are to be referred to, for them to be named. I therefore propose the names—(a) *anterior puncture*, (b) *apical puncture*, (c) *inner marginal puncture* of posterior coxæ; according as they are placed—(a) at about half the breadth of the anterior part of the coxa, (b) near the apex of the coxa, (c) near the inner margin of the coxa a little before the insertion of the trochanters. When all three punctures are present the coxæ may be called *tripunctate*.

‡ It may be noted that in this species the setigerous puncture usually so conspicuous on the upper side (towards the apex) of the basal joint of the antennæ among the CARABIDÆ is wanting. This puncture may prove of classificatory value in some groups of the CARABIDÆ. *P. noctis* is the only Broscide that has come under my notice in which it has been wanting.

impression reaching almost to the sides at their posterior sinuosity; anterior margin truncate between the lateral borders; base truncate, not bordered; anterior angles advanced, obtuse, their inner margin slightly oblique; basal angles rectangular; lateral border *entire*, thick, gradually widening in front from anterior marginal puncture, narrower and equal backwards from that puncture, lightly sinuate before the base; median line lightly impressed, not reaching either margin. Elytra smooth, oval (16.5 x 10 mm.) subparallel on sides, gently rounded to peduncle and to apex, convex, very declivous behind, hardly at all declivous to peduncle behind scutellum; suture lightly impressed; border narrow, becoming wider behind; a row of unequally and widely-placed punctures at a little distance from the margin. Prosternum transversely impressed in front of coxæ, rounded behind and projecting slightly backwards, not excavate between coxæ, sharply declivous to anterior margin. Ventral segments smooth, impunctate. Femora broad, flattened, very lightly channelled below for whole length; posterior ones strongly dilatate on lower side behind middle: anterior tibiæ with external edge smooth, not ending in a dentiform projection at apex; four posterior tibiæ dilatate at apex, their outer edge not concave: posterior trochanters (in the male) very long, pointed, bent inwards near apex: posterior tarsi short, thick; joints 1-4 successively shorter—first, short (not as long as two succeeding ones together), 2-4 short, broad, turbinate, last convex, not narrowed to base.

Length, 28; breadth, 10 mm.

Habitat.—Murchison District, West Australia.

This species is readily distinguished from *P. grandis*, Casteln., by its more elongate form. Five specimens have come under my notice; three of these agree in all particulars with the description given above, and one of these is certainly a male. The other two are females, and differ from the description only in the shape of the posterior trochanters, which are almost as in *Parroa grandis* (female), being oval and narrowed to the bluntly-pointed apex, and not elongate, narrow, and bent as in the other specimens. The elongate bent posterior trochanters seem peculiar to the male; the male of both *P. grandis* and *P. Howitti* may be expected to have similar trochanters. The posterior coxæ in all these specimens have each a single puncture near the inner margin a little before the insertion of the trochanters. The male alluded to above I have received very recently from Mr. French, of Melbourne, as coming from the Gnarlbine Goldfields, W.A. It is a fresh and perfect specimen, and has the apex of the anterior tibiæ fringed on their inner side with fulvous hair and produced forward in a strong spur about half as long as the inner apical

spur. (I find the same feature, though in a less marked degree, in the type specimen of *Adotela Frenchi*, Sl.)

***Parroa lævigata*, spec. nov.**

Form light, elongate; dorsal surface lævigata. Shining black.

Male.—Head large, not narrowed behind eyes, occipital part smooth, wide, convex; a broad shallow impression on each side between the eyes extending forward to the clypeus; front convex between these impressions; clypeal suture indistinct; clypeus very lightly emarginate in front, a shallow triangular impression on each side, having a setigerous puncture placed at its inner angle; eyes round, convex, not prominent or inclosed behind. Labrum short, lightly emarginate and sexsetose in front; the anterior angles rounded; median sulcus wanting towards anterior margin, but perceptible near clypeus. Penultimate joint of maxillary palpi short, triangular, with a short erect seta on inner side; last joint a little flattened, lightly narrowed to apex, truncate; penultimate joint of labial palpi with two setae in front and two shorter ones (one on each side) at apex; last joint broad, hardly narrowed to apex, truncate; external edge arcuate. Antennae slender, submoniliform; second joint shorter than fourth; last short, obtuse. Prothorax subcordate, as long as broad (5 x 5 mm.), widest a little before the middle, convex, lightly declivous behind; sides subparallel between the marginal punctures, shortly rounded to anterior angles, lightly narrowed behind; base truncate; anterior margin truncate between anterior angles; these shortly but decidedly advanced; basal angles rectangular; marginal border narrow, a little widened in front to form the anterior angles, very narrow on sides near base, lightly sinuate before the base, wider, less reflexed, and entire on base; median line lightly impressed; a well-marked oblique line extending from each anterior angle about one-third across the prothorax just behind the anterior margin. Elytra oval (9 x 5.5 mm.), convex, lightly declivous behind, declivous to peduncle behind scutellum; sides subparallel in middle; shoulders rounded off; apex broadly rounded; suture strongly impressed; lateral border narrow, equal; a single puncture at the base of each elytron; three lateral punctures on each side, one behind the shoulder, the other two a little distance apart where the apical curve of the elytra begins. Prosternum deeply excavate between the coxae, not produced backwards behind them, smooth in front of coxae; anterior margin bordered. Ventral segments smooth, without lateral impressions, ambulatorial setae present, two punctures on each side of anus. Legs light: femora not channelled below; anterior dilatate in middle, posterior with lower side not produced in middle: anterior tibiae with apex wide and forming a

sharp dentiform projection externally: posterior trochanters broad, short, widely rounded at apex: tarsi narrow, without spongiose tissue on underside of anterior ones: posterior elongate; joints 1-4 successively shorter—first, long, about as long as two succeeding ones together, last narrowed to apex.

Length, 15.5; breadth, 5.5 mm.

Female differing from male in its rather lighter form; smaller head; prothorax proportionately narrower than elytra (4.25 x 4.25 mm.); elytra more convex and less widely rounded behind (8.75 x 5.25 mm.); last joint of the palpi narrower.

Length, 14.5; breadth, 5.25 mm.

Habitat.—Barrow Range, Central Australia. Two specimens, male and female.

This species is allied to *P. australis*, Sl., and *P. atronitens*, Sl., from both of which species it may readily be distinguished by the slightly projecting anterior angles of the prothorax, by both prothorax and elytra being less rounded at the middle of their length, and by the decidedly impressed suture of the elytra. These three species all have the posterior coxæ tripunctate.* *P. carbonaria*, Casteln., a black species from West Australia, very little larger than the present, I have never seen; it differs by description in having the labrum rounded.†

***Parroa apicalis*, spec. nov.**

Form broad, convex; upper surface smooth, excepting apex of elytra. Black, shining. Head large (5.25 x 5.25 mm.), smooth, wide, but not swollen behind eyes; front with two well-marked long parallel impressions extending to margin of clypeus near its anterior angles; clypeal suture fine, bent forward sharply on each side, a small puncture on each side at the angles made by the lateral bend; clypeus with anterior margin very lightly concave, a foveiform setigerous puncture on each side; eyes round, convex, not prominent or inclosed behind. Mandibles long,

* See note, ante p. 207.

† I have lately obtained specimens (both male and female) of *Parroa australis*, Sl., as coming from South Australia, but without exact locality. I am therefore able to report that the male is comparatively broader than the female, the elytra having a shorter and more convex appearance. The maxillary palpi have the penultimate joint very short and triangular with a seta projecting forward on the internal side, the last joint oblong, thick, truncate, a little narrowed to apex; the labial palpi have the penultimate joint bisetose in front, and without setae at apex, the last joint thick, arcuate externally, narrowed to apex, truncate. The legs are light, the anterior femora slightly dilatate in middle, the anterior tarsi not dilatate or with brushes of spongiose tissue on underside; the posterior tarsi narrow; joints elongate, first long, hardly as long as two succeeding ones together, last elongate, narrowed to apex. Length, 15.5; breadth, 5.5 mm. Specimens before me vary in length from 14.5 mm. to 17 mm.

acute. Labrum canaliculate; anterior angles lightly rounded; margin sexsetose, lightly concave. Antennæ filiform; second joint as long as fourth. Prothorax broader than long (6.75 x 7.5 mm.), subparallel on sides, narrowed to base, subconvex, slightly declivous behind; the basal part defined by an entire obsolete impression; median line finely but distinctly impressed, crossed along its whole length by very fine striolæ; sides covered with minute transverse striolæ; anterior margin very lightly sinuate between lateral borders; base truncate, lightly bordered on each side near basal angles; anterior angles rather strongly advanced, narrowly obtuse, their inner margin almost straight; basal angles rather acute, projecting a little backwards and downwards; lateral border rather wide, with thick reflexed edge, widening in front from a little behind anterior marginal puncture, bent downward before the base, a little narrower after the sinuosity thus caused. Elytra ovate (12 x 8.5 mm.), widest rather behind the middle, convex, declivous to peduncle; posterior part declivous, and rugose towards apex; sides subparallel in middle, lightly rounded to peduncle, broadly rounded at apex; suture fine, very narrowly impressed; border narrow on sides, wider behind; two fine punctures on margin at shoulder, none along sides, a few near edge of posterior-third, becoming lost in the apical rugosity. Prosternum smooth, sloping gently to anterior margin; base emarginate; episterna very finely transversely striolate under a lens. Ventral segments smooth, excepting for a few scattered scratches; segments 3-6 lightly impressed on sides, these impressions very shallow and wide, more distinct on two apical segments. Legs light: femora excavate below only near apex; anterior rather wider, a little flattened; posterior long, not dilatate in middle: posterior trochanters short, obtuse at apex: posterior tarsi narrow; joints elongate, first long (about as long as two succeeding ones) last long, cylindric, narrowed to base.

Length, 21; breadth, 8.5 mm.

Habitat.—Australia (exact place of capture uncertain). In the collection of Rev. T. Blackburn.

This species seems an isolated one by its facies, and the form of the basal angles of the prothorax, before which the lateral border slopes sharply downwards, causing them to become acute. The elytra are much broader behind than in any other species I have seen, and far more strongly rugose towards the apex; this rugosity extends over most of the posterior declivity. The emargination of the mentum is quite edentate and even rounded behind. Only the labial palpi are present in the specimen before me; they are more slender than in any other *Parroa* I have seen; the two last joints are of about equal length, the last is

truncate at apex, greatly narrowed to base, and a little arcuate externally. The ventral segments have distinct lateral foveæ, and the apical one is without any punctures at the sides of the anus; characters I have not before seen in the genus. The emargination of the prosternum behind the coxæ is an unusual feature in the genus. The "anterior" and "inner marginal" punctures of the posterior coxæ only are present.*

Adotela esmeralda, *Casteln.*

Loc. cit., p. 175; Putzeys, *Ann. Mus. Civ. Genov.*, IV., p. 340; Sloane, loc. cit., p. 234.

Female.—Form oval, very convex; suture of elytra not forming a depression; anterior angles of prothorax very slightly advanced; upper surface lævigata, excepting apex of elytra.

Very shining, general colour black, elytra blackish-green, the green tint becoming bright on sides and inflexed part, a green flush along upper lateral margin of prothorax, also on most of its under-parts. Head smooth, excepting clypeus, large (4 x 4.25 mm.), convex, wide, but not swollen behind eyes; front with two broad, shallow impressions diverging a little behind and extending forward across the clypeus, the space between these impressions lightly convex; clypeal suture very fine, interrupted in frontal impressions, bent forward at each side, a fine puncture on each side at the angle made by the lateral bend; clypeus a little rugulose, the lateral setigerous punctures shallow, not near edge; eyes round, convex, not prominent or inclosed behind. Labrum short, lightly emarginate; anterior angles rounded. Antennæ filiform; second joint shortest, though only a little shorter than fourth. Prothorax short (5.5 x 6.25 mm.), convex, slightly declivous behind; basal part defined by a light transverse impression not reaching to near the margins; sides rounded, very little narrowed in front, shortly but decidedly so behind; anterior margin truncate between lateral borders; base truncate, with only a slight trace of a border on each side near margin; anterior angles obtuse, very little advanced, their inner margin sloping backwards very gently; basal angles rectangular; lateral border *entire*, narrow, a little sinuate before the base; median line lightly impressed on disc. Elytra smooth, excepting a little rugosity near apex, oval (11.5 x 7.25 mm.), very convex, declivous to the peduncle, and strongly so behind; sides lightly rounded, a little more shortly so to base than to apex; suture fine, not impressed; border very narrow on sides, widening continuously, and becoming broadly reflexed from posterior-third to apex; marginal punctures wanting on middle of sides (two or three near shoulders, and four or five on posterior-third). Prosternum

* See note, *ante*, p. 207.

gently declivous in front to anterior margin, not excavate between the coxæ; base round, with a small projection behind. Ventral segments smooth. Legs light: femora—anterior thickest, flattened; intermediate narrow, longer than anterior; posterior widest in middle, a little sinuate before apex on lower side: tibiæ—anterior wide at apex, ending externally in a strong dentiform projection, external edge smooth; intermediate with outer edge concave, dilatate at apex, and ending externally in a flattened pointed projection: posterior trochanters smooth, short, regularly oval: posterior tarsi narrow, elongate; joints 1-4 successively shorter, first about as long as two succeeding ones together, last not elongate, convex, hardly narrowed to base.

Length, 19; breadth, 7.25 mm.

Habitat.—Murchison District, W.A.

The described species that can be undoubtedly referred to the genus *Adotela* are *A. concolor*, Castlen., *A. esmeralda*, Castlen., *A. carenoides*, Putz., and *A. viridis*, MacL. The difference in colour is in itself sufficient to distinguish the first from the second, while the projecting angles of the prothorax at once separates both these from *A. carenoides* and *A. viridis*. In the specimen described above, the posterior coxæ have two punctures, the "apical" and the "inner marginal."*

AMYCTERINI.

FAM. CURCULIONIDÆ.

By T. G. SLOANE, F.E.S.

The *Amycteridæ* of the Elder Exploring Expedition number sixteen species, all belonging to that division of the family characterised by having the scape of the antennæ passing the eye. I regard all as undescribed species; of this I feel the more confident because I have been able, during a hurried visit to Sydney, to compare them with the types of the *Amycterides* described by the late Sir William Macleay, and so to assure myself that none was among the species of that author.

It is not easy to determine the previously-described *Amycteridæ*, owing partly to the close resemblance of many of the species making their exact description difficult, and partly owing to the lamentable conciseness former authors have adopted in diagnosing their species. To their too-brief descriptions they all, unfor-

* See note, *ante*, p. 207.